IN THE CLAIMS

Amend the claims as follows:

1. (Currently Amended)   A method of providing synchronous cardiac biventricular stimulation by stimulating a left ventricle with a left ventricular lead that includes a left ventricular electrode, and by stimulating a right ventricle with a right ventricular lead that includes a right ventricular electrode, the method comprising the steps of:

generating biventricular ~~stimulation~~ pacing pulses at an amplitude sufficient to capture the heart;

selectively delivering the biventricular ~~stimulation~~ pacing pulses on demand with a cross-chamber configuration between the left ventricular electrode and the right ventricular electrode, for synchronously ~~stimulating~~ pacing the left and right ventricles; and

verifying capture of the left ventricle and the right ventricle.

2. (Original)   The method according to claim 1, wherein the right ventricular electrode and the left ventricular electrode are tip electrodes; and

wherein the delivering step includes the step of stimulating with the tip electrodes.

3. (Original)   The method according to claim 1, further including programmably selecting polarities for the right ventricular electrode and the left ventricular electrode to control an activation stimulation sequence.

4. (Original)   The method according to claim 3, wherein the delivering step includes delivering a biphasic pulse.

5. (Original)   The method according to claim 3, wherein the delivering step includes delivering a monophasic pulse.

6.   (Original)   The method according to claim 3, wherein the delivering step includes delivering a positive pulse to the right ventricular electrode and delivering a negative pulse to the left ventricular electrode.

7.   (Original)   The method according to claim 3, wherein the step of verifying capture includes sensing in a bipolar configuration between a first right ventricular electrode and a second right ventricular electrode.

8.   (Original)   The method according to claim 3, wherein the step of verifying capture includes sensing in a cross-chamber configuration between a sensing electrode pair which is different from the right and left ventricular electrodes.

9.   (Original)   The method according to claim 8, wherein the right ventricular electrode and the left ventricular electrode are tip electrodes;
        wherein the sensing electrode pair includes a right ventricular ring electrode and a left ventricular ring electrode; and
        wherein sensing in the cross-chamber configuration includes with the ring electrodes.

10.   (Original)   The method according to claim 8, further including the step of programmably selecting polarities for the sensing electrode pair to control a directional pathway of sensing within the right and left ventricles.

11.   (Original)   The method according to claim 9, wherein the step of verifying capture includes taking cardiac impedance measurements.

12.   (Original)   The method according to claim 3, wherein the step of verifying capture includes taking cross-v ntricular impedance measurements in a cross-chamber arrangement by applying an excitation curr nt pulse between a first right ventricular electrode and a first left ventricular electrode, and sensing a resulting voltage differential between a second right ventricular electrode and a second left ventricular electrode.

13.   (Original)   The method according to claim 3, wherein the right ventricular lead is a bipolar lead that includes first and second right ventricular electrodes;

wherein the left ventricular lead is a bipolar lead that includes first and second left ventricular electrodes; and

wherein the step of verifying capture in the right ventricle includes delivering a stimulation pulse between the first and second right ventricular electrodes and sensing a resulting voltage differential between the first and second left ventricular electrodes.

14.   (Original)   The method according to claim 3, wherein the right ventricular lead is a bipolar lead that includes first and second right ventricular electrodes;

wherein the left ventricular lead is a bipolar lead that includes first and second left ventricular electrodes; and

wherein the step of verifying capture in the left ventricle includes delivering a stimulation pulse between the first and second left ventricular electrodes and sensing a resulting voltage differential between the first and second right ventricular electrodes.

15.   (Original)   The method according to claim 3, further including the step of positioning a left atrial lead that includes a left atrial electrode; and

the step of sensing a myoelectric signal betwe n the left atrial lectrode and the right ventricular electrode.

16.   (Original)   The method according to claim 15, wherein the st p of verifying capture includes confirming loss of capture by detecting a sequence of time delay and an intrinsic response immediately following a stimulation pulse.

17.   (Original)   The method according to claim 15, wherein the step of verifying capture includes confirming synchronous capture of the left and right ventricles by detecting an evoked response immediately following a stimulation pulse.

18.   (Currently Amended)   A cardiac simulation system for providing synchronous biventricular stimulation, comprising:
        a left ventricular lead including a left ventricular electrode that delivers stimulation pacing pulses to a left ventricle;
        a right ventricular lead including a right ventricular electrode that delivers stimulation pacing pulses to a right ventricle;
        a pulse generator connected to the left ventricular lead and the right ventricular lead, and adapted to perform biventricular stimulation pacing with a cross-chamber configuration between the left ventricular electrode and the right ventricular electrode, to synchronously capture the left and right ventricles; and
        an automatic capture detector coupled to the pulse generator to verify capture of the left ventricle and the right ventricle.

19.   (Original)   The stimulation device according to claim 18, wherein the automatic capture detector programmably selects polarities for the right ventricular electrode and the left ventricular electrode to control an activation stimulation sequence.

20.   (Currently Amended)   The stimulation device according to claim 19, wherein the automatic capture detector performs automatic capture verification of the biventricular stimulation pacing with a cross-chamber sensing configuration.

21.   (Original)   Th stimulation device according to claim 20, further including an imp danc measuring circuit that provides impedance measurements to the automatic capture detector for performing capture v rification.

22.   (Original)   The stimulation device according to claim 18, wherein the right ventricular electrode and the left ventricular electrode are tip electrodes; and

further including a sensing electrode pair comprised of a right ventricular ring electrode and a left ventricular ring electrode.

23.   (Original)   The stimulation device according to claim 18, wherein the right ventricular lead is a bipolar lead that includes first and second right ventricular electrodes;

wherein the left ventricular lead is a bipolar lead that includes first and second left ventricular electrodes; and

wherein the automatic capture detector verifies capture in the right ventricle by delivering a stimulation pulse between the first and second right ventricular electrodes and by sensing a resulting voltage differential between the first and second left ventricular electrodes.

24.   (Original)   The stimulation device according to claim 18, wherein the right ventricular lead is a bipolar lead that includes first and second right ventricular lectrodes;

wherein the left ventricular lead is a bipolar lead that includes first and second left ventricular electrodes; and

wherein the automatic capture detector verifies capture in the left ventricle by delivering a stimulation pulse between the first and second left ventricular electrodes and by sensing a resulting voltage differential between the first and second right ventricular electrodes.

25.   (Original)   The stimulation device according to claim 18, wherein the automatic capture detector confirms loss of capture by detecting a sequ nce of time delay and an intrinsic response immediately following a stimulation pulse.

26.   (Original)   The stimulation device according to claim 18, wherein the automatic capture detector confirms synchronous capture of the left and right ventricles by detecting an evoked response immediately following a stimulation pulse.

27.   (Currently Amended)   A cardiac simulation system for providing synchronous biventricular stimulation, comprising:
        means for generating ~~stimulation~~ pacing pulses <u>at an amplitude sufficient to capture the heart</u>;
        means for selectively delivering the ~~stimulation~~ <u>pacing</u> pulses to a left ventricle;
        means for selectively delivering the ~~stimulation~~ <u>pacing</u> pulses to a right ventricle;
        means for synchronously capturing the left and right ventricles by performing biventricular ~~stimulation~~ <u>pacing</u> with a cross-chamber configuration between the left ventricular electrode and the right ventricular electrode; and
        means for verifying capture of the left ventricle and the right ventricle.

28.   (Currently Amended)   The stimulation device according to claim 27, wherein the means for verifying capture performs automatic capture verification of the biventricular ~~stimulation~~ <u>pacing</u> with a cross-chamber sensing configuration.

29.   (Original)   The stimulation device according to claim 27, wherein the means for verifying capture confirms loss of capture by detecting a sequence of time delay and an intrinsic response immediately following a stimulation pulse.

30.   (Original)   The stimulation device according to claim 27, wherein the means for verifying capture confirms synchronous capture of the left and right ventricles by detecting an evoked respons imm diately following a stimulation pulse.